



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,810	09/29/2003	Andrew John Farnsworth	1578.619(PUS-1155)	2209

44208 7590 07/18/2005

DOCKET CLERK
PO BOX 12608
DALLAS, TX 75225

EXAMINER

VU, MICHAEL T

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,810

Applicant(s)

FARNSWORTH, ANDREW JOHN

Examiner

Michael Vu

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/29/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The following title is suggested: "be more specific with the title that related to the invention".

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

Art Unit: 2683

- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

(Applicant must show all requirement headings)

" Need DETAILED DESCRIPTION OF THE INVENTION"

Drawings

Need "Prior Art" label on Figures 1 to 3.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

Art Unit: 2683

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo (US 2004/0203971) in view of Wu (2003/0210676), and further view of Sarkkinen (US 203/0119533). [Hereafter, Kuo + Wu + Sarkkinen]

Regarding **claim 1**, a method of processing messages received by a device from a network (Fig. #1, between UE and UTRAN, [0008] sending or responding message), the method comprising: receiving a message that indicates that the device should be in a dedicated channel state (when receiving message the UE 40 is the dedicated channel (CELL_DCH) state 82, [0010]), and in response to the message, but Kou **fails to teach** wherein the message is a message other than a reconfiguration message. However, Wu teaches the cell update confirm between UE and UTRAN, which is not a reconfiguration message, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update, and URA update (Fig. #6, [0046])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message to avoid such loss and increasing the bandwidth utilization efficiency in between the UTRAN and UE.

But also Kuo **fails to teach** to clearing from the device any record of a cell identifier. However, Sarkkinen teaches the cleaning of the database from the Multicast Database, which is update message and check the identification of the UE from the Mu UE-id field and delete records from old database. (Fig. #2, and [0077].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message clearing from the device any record of a cell identifier to prevent or avoid the duplicate, overlapping or redundancy of receiving message between UE and UTRAN.

Regarding **claim 2**, Kuo teaches in claim 1, he further teaches wherein the dedicated channel is a Cell_DCH channel ([0007]).

Regarding **claim 3**, Kuo teaches in claim 1, he further teaches wherein the reconfiguration messages consist of the following: Radio Bearer Setup message, Radio Bearer Reconfiguration message, Radio Bearer Release message, Transport Channel Reconfiguration message or Physical Channel Reconfiguration message ([0008]).

Regarding **claim 4**, Kou teaches in claim 1, but **fails to teach** wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to

Art Unit: 2683

identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Regarding **claim 5**, Kuo teaches in claim 1, but **fails to teach** wherein the message is one of the following: a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message. However, Wu teaches the cell update confirm between UE and UTRAN, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update procedure, Fig. #9, [0029]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message to prevent and ensure of the routing packet / avoiding the loss of packet or data.

Regarding **claim 6**, Kou teaches a method according to any preceding claim wherein when the message is a message that indicates that the device should move into a dedicated channel state (the Radio

Art Unit: 2683

Link Control layer has confirmed the successful transmission of the response message then moved into a dedicated channel state [0010]),

but **fails to teach** to the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state. However, Sarkkinen teaches the cleaning of the database, the new RNC requests the old RNC to delete corresponding records from old RNC's database, based on the multicast subscriber update message to the old RNC which deletes the invalid records from the database (Fig. #2, delete from Old RNC subscriber related information from the database, and (deletion will base on the value of Mu UE-id field [0077])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state to prevent or avoid the duplicate or overlapping or redundancy of receiving message from different UE.

Regarding **claim 7**, Kou teaches in claim 1, but **fails to teach** wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Kou teaches in claim 1, but fails to teach to not storing in the device any record of the cell identifier included in the message. However, Sarkkinen teach the cleaning of database or delete corresponding records from old database based on the value of Mu UE—id field (Fig. #2, [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that to not storing in the device any record of the cell identifier included in the message to check the identification from each UE to generate records. Regarding **claim 8**, Kou teaches a method of processing messages received by a device from a network (Fig. #1, between UE and UTRAN, [0008] sending or responding message), the method comprising: receiving a message that indicates that the device should be in a dedicated channel state (when receiving message the UE 40 is the dedicated channel (CELL_DCH) state 82, [0010]), and in response to the message, but Kou **fails to teach** wherein the message is a message other than a reconfiguration message. However, Wu teaches the cell update confirm between UE and UTRAN, which is not a reconfiguration message, and including the Downlink counter synchronization information in the RRC

Art Unit: 2683

message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration, and Cell Update, and URA update (Fig. #6, [0046]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message to avoid such loss and increasing the bandwidth utilization efficiency in between the UTRAN and UE.

But also Kuo **fails to teach** to clearing from the device any record of a cell identifier. However, Sarkkinen teaches the cleaning of the database from the Multicast Database, which is update message and check the identification of the UE from the Mu UE-id field and delete records from old database. (Fig. #2, and [0077].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that wherein the message is a message other than a reconfiguration message clearing from the device any record of a cell identifier to prevent or avoid the duplicate, overlapping or redundancy of receiving message between UE and UTRAN.

Regarding **claim 9**, Kuo teaches in claim 8, he further teaches apparatus according to claim 8 wherein the dedicated channel is a Cell_DCH channel ([0007]).

Regarding **claim 10**, Kuo teaches in claim 8, he further teaches apparatus according to claim 8 wherein the reconfiguration messages

Art Unit: 2683

consist of the following: Radio Bearer Setup message, Radio Bearer Reconfiguration message, Radio Bearer Release message, Transport Channel Reconfiguration message or Physical Channel Reconfiguration message ([0008]).

Regarding **claim 11**, Kou teaches in claim 8, but **fails to teach** Apparatus according to claim 8 wherein the cell identifier is a Cell Radio Network Temporary Identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Regarding **claim 12**, Kuo teaches in claim 8, but **fails to teach** Apparatus according to claim 8 wherein the message is one of the following: a Cell Update Confirm message, a URA Confirm Update message or a RRC Connection setup message. However, Wu teaches the cell update confirm between UE and UTRAN, and including the Downlink counter synchronization information in the RRC message (Radio Bearer Setup, Radio Bearer Release, Transport Channel Reconfiguration,

and Cell Update procedure, Fig. #9, [0029]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that a Cell Update Confirm message or a URA Update Confirm message or a RRC Connection setup message to prevent and ensure of the routing packet / avoiding the loss of packet or data.

Regarding **claim 13**, Kou teaches of claim 8 to 12 wherein the apparatus is further arranged, on receipt of a message that indicates that the apparatus should move into a dedicated channel state (the Radio Link Control layer has confirmed the successful transmission of the response message then moved into a dedicated channel state [0010]),

but **fails to teach** to clear from the apparatus any record of a cell identifier before moving to the dedicated channel state. However, Sarkkinen teaches the cleaning of the database, the new RNC requests the old RNC to delete corresponding records from old RNC's database, based on the multicast subscriber update message to the old RNC which deletes the invalid records from the database (Fig. #2, delete from Old RNC subscriber related information from the database, and (deletion will base on the value of Mu UE-id field [0077])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that the method further comprises clearing from the device any record of a cell identifier before moving to the dedicated channel state to prevent or avoid

the duplicate or overlapping or redundancy of receiving message from different UE.

Regarding **claim 14**, Kuo teaches in claim 8, wherein the apparatus is further arranged, on receipt of a message that includes a new cell identifier, not to store in the apparatus any record of the cell identifier included in the message, but **fails to teach** apparatus according to claim 8 wherein the apparatus is further arranged, on receipt of a message that includes a new cell identifier. However, Wu teaches in telecommunication systems such as 3G or UTMS systems enter into such a state of which the mobile station needs a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kou, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier to check if a state need to change for a mobile station which reduces signaling between UE and UTRAN.

Kou teaches in claim 8, but fails to teach to not to store in the apparatus any record of the cell identifier included in the message. However, Sarkkinen teach the cleaning of database or delete corresponding records from old database based on the value of Mu UE—id field (Fig. #2, [0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo, such that not to store in the apparatus any record of the cell identifier included in the message to check the identification from each UE to generate records.

Regarding **claim 15**, Kou teaches a mobile telecommunication device incorporating apparatus according to claim 8. (Fig. #1, between UE and UTRAN, [0008] sending or responding message).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. (US 2005/0009527)
2. (US 2003/0236085)
3. (US 2003/0171129)
4. (US 2003/0235212)
5. (US 2004/0203778)
6. (US 2004/0053598)
7. (US 6826406)
8. (US 2003/0050097)
9. (US 2003/0210676)
10. (US 2003/0104801)
11. (US 2003/0211846)
12. (US 2002/0142749)

Art Unit: 2683

13. (US 6,782,274)
14. (US 6,850,759)
15. (US 2004/0203778)
16. (US 6,898,429)
17. (US 2003/0119533)
18. (US 2004/0053597)
19. (US 2004/0203971)
20. (US 2003/0210714)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

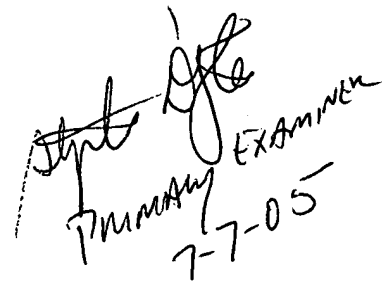
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Vu



Primary Examiner
7-7-05